

	Application No.	Applicant(s)
Notice of Allowability	09/890,441	UCHINO ET AL.
	Examiner	Art Unit
	Lawrence B. Williams	2611
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>05 October 2006</u> .		
2. The allowed claim(s) is/are <u>9,11-15,23, renumbered as 1,2-6,7</u> .		
 3.		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s)	5 🗆 Nation (1.6 and 1.7	And and Annull and a
 Notice of References Cited (PTO-892) Notice of Draftperson's Patent Drawing Review (PTO-948) 	5. ☐ Notice of Informal P6. ☐ Interview Summary	
	Paper No./Mail Dat	te
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 	7. Examiner's Amendr	ment/Comment
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's Stateme	ent of Reasons for Allowance
	9. Other	

TERMINAL DISCLAIMER

1. The terminal disclaimer filed on 30 November 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent 6,854,068 B2 has been reviewed and is accepted. The terminal disclaimer has been recorded.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance: The instant application discloses a wander generator for generating a clock signal. The closest prior art of record is Applicant's US Patent 6,854,068 B2 for which applicant has filed an terminal disclaimer. A search of prior art records has failed to teach or suggest alone or in combination:

"a wander generator for generating a clock signal having wander which satisfies a desired time deviation characteristic, comprising: center frequency information setting means for setting data for determining a center frequency of the clock signal; characteristic information setting means for setting characteristic information of the desired time deviation characteristic; a fluctuating signal sequence generator unit for generating a fluctuating signal sequence having a power spectrum density distribution characteristic of frequency fluctuations corresponding to the desired time deviation characteristic based on the characteristic information set by said characteristic information setting means; an adder for adding the data set by said center frequency information setting means to the fluctuating signal sequence output from said fluctuating signal sequence generator unit; a direct digital synthesizer for outputting a frequency

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signal corresponding to an output of said adder; and a clock signal output circuit for waveform shaping an output signal of said direct digital synthesizer to output a clock signal; wherein said fluctuating signal sequence generator unit comprises: noise generating means for generating a white noise signal based on a pseudo random signal; impulse response processing means for calculating an impulse response of a transfer function for approximating a power spectrum of the white noise signal output from said noise generating means to the power spectrum density distribution characteristic of the frequency fluctuations based on the characteristic information set by said characteristic information setting means; and convolution processing means for convoluting a result of the calculation by said impulse response processing means with the white noise signal output from the noise generating means to generate the fluctuating signal sequence having the power spectrum density distribution characteristic of the frequency fluctuations" as disclosed in claim 9.

"a wander generator for generating a clock signal having wander which satisfies a desired time deviation characteristic, comprising: center frequency information setting means for setting data for determining a center frequency of the clock signal; characteristic information setting means for setting characteristic information of the desired time deviation characteristic; a fluctuating signal sequence generator unit for generating a fluctuating signal sequence having a power spectrum density distribution characteristic of frequency fluctuations corresponding to the desired time deviation characteristic based on the characteristic information set by said characteristic information setting means; an adder for adding the data set by said center frequency information setting means to the fluctuating signal sequence output from said fluctuating signal sequence generator unit; a direct digital synthesizer for outputting a frequency

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signal corresponding to an output of said adder; and a clock signal output circuit for waveform shaping an output signal of said direct digital synthesizer to output a clock signal; wherein said fluctuating signal sequence generator unit comprises: noise generating means for generating a white noise signal based on a pseudo random signal; data distributing means for distributing noise signals output from said noise generating means into respective signal paths in accordance with a plurality of bands into which a frequency range of the power spectrum density distribution characteristic of the frequency fluctuations is divided to output at rates corresponding to the respective bands; weighting means for applying weights in accordance with a magnitude of spectrum of each of the bands into which the frequency band of the power spectrum density distribution characteristic is divided for the noise signals at the respective rates distributed by said data distributing means; and combining means for combining the noise signals at the respective rates weighted by said weighting means to generate the fluctuating signal sequence having the power spectrum density distribution characteristic of the frequency fluctuations" as disclosed in claim 14.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONCLUSION

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammad can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

November 30, 2006

PRIMARY EXAMINER